

# RO 12/30

kV dependent max mA values for exposure times  $\leq 100\text{ms}$  in combination with Optimus 50/65/80kW

kV	SF [ $\mu\text{A}$ ]	LF [ $\mu\text{A}$ ]	kV	SF [ $\mu\text{A}$ ]	LF [ $\mu\text{A}$ ]	kV	SF [ $\mu\text{A}$ ]	LF [ $\mu\text{A}$ ]	kV	SF [ $\mu\text{A}$ ]	LF [ $\mu\text{A}$ ]
40	193000	380000	70	171428	428571	100	120000	300000	130	92307	230769
41	200600	390000	71	169014	422535	101	118811	297029	131	91603	229007
42	208200	400000	72	166666	416666	102	117647	294117	132	90909	227272
43	215800	410000	73	164383	410958	103	116504	291262	133	90225	225563
44	223400	420000	74	162162	405405	104	115384	288461	134	89552	223880
45	231000	430000	75	160000	400000	105	114285	285714	135	88888	222222
46	237333	438000	76	157894	394736	106	113207	283018	136	88235	220588
47	243666	446000	77	155844	389610	107	112149	280373	137	87591	218978
48	250000	454000	78	153846	384615	108	111111	277777	138	86956	217391
49	244897	462000	79	151898	379746	109	110091	275229	139	86330	215827
50	240000	470000	80	150000	375000	110	109090	272727	140	85714	214285
51	235294	477000	81	148148	370370	111	108108	270270	141	85106	212765
52	230769	484000	82	146341	365853	112	107142	267857	142	84507	211267
53	226415	491000	83	144578	361445	113	106194	265486	143	83916	209790
54	222222	498000	84	142857	357142	114	105263	263157	144	83333	208333
55	218181	505000	85	141176	352941	115	104347	260869	145	82758	206896
56	214285	509080	86	139534	348837	116	103448	258620	146	82191	205479
57	210526	513160	87	137931	344827	117	102564	256410	147	81632	204081
58	206896	517241	88	136363	340909	118	101694	254237	148	81081	202702
59	203389	508474	89	134831	337078	119	100840	252100	149	80536	201342
60	200000	500000	90	133333	333333	120	100000	250000	150	80000	200000
61	196721	491803	91	131868	329670	121	99173	247933			
	193548	483870	92	130434	326086	122	98360	245901			
	190476	476190	93	129032	322580	123	97560	243902			
	187500	468750	94	127659	319148	124	96774	241935			
	184615	461538	95	126315	315789	125	96000	240000			
	181818	454545	96	125000	312500	126	95238	238095			
	179104	447761	97	123711	309278	127	94488	236220			
	176470	441176	98	122448	306122	128	93750	234375			
	173913	434782	99	121212	303030	129	93023	232558			

These are the default values of the tube data file TUBE\_R2.TDL or TUBE\_R3.TDL.

Typically there are no changes after adaptation except there are reductions due to the max generator power (Optimus 50kW = 650mA max) or if the filament does not have its full emission anymore (e.g. from shorted filament loops).

The **red marked** emission current values (at 48kV SF and 58kV LF) are the max emission currents at a kV value from which on the filament current can be reduced to achieve its max load performance.